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ABSTRACT

This booklet shows how every individual can do something positive for the environment by making art that makes a difference. Themes from the Fragile Ecologies exhibition have been used as seeds for creative environmental projects that can be done either individually or working in groups. Artists whose work is featured include Patricia Johanson, Helen Mayer Harrison and Newton Harrison, Betty Beaumont, Alan Sonfist, Nancy Holt, Mel Chin, Buster Simpson, Heather McGill and John Roloff, Mierle Laderman Ukeles, and Cheri Gaulke. Contains 12 references. (JRH)

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ED 399 131

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Adventures in Ecological Art for Kids and Families

fragile ecologies

Contemporary Artists' Interpretations and Solutions

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How You Can Make a Difference for the Environment

If you've always thought of artists as people who make paintings or sculptures you're in for a surprise. Some artists are focusing on environmental problems like water pollution, air pollution, endangered species, and toxic waste. "The earth is their canvas and their philosophy is, 'It's dirty—let's clean it up.'"*

This booklet shows how you can do something positive for the environment—and yourself—by making art that makes a difference. Here's how.

We've used the themes from the exhibition *Fragile Ecologies* as "seeds" for creative environmental projects for your town, your neighborhood, even your backyard. Some of these projects you can do on your own; for others you may enjoy working with friends, family, or classmates. We hope to get you thinking about the environment and ways we can all work together to make it better.

In reading, if you are not familiar with the words in *italic letters*, just flip to the glossary at the end. And if you're hungry for more projects—or just more information—check the list of books we've supplied.

Remember—the only limit is your imagination!

Sharon Vatsky, Curator of Education, Queens Museum of Art
and the *Fragile Ecologies* exhibition team

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Patricia Johanson, *Leonhardt Lagoon* (Dallas, Texas), 1981-86 (illus. based on photograph)

Habitat Gardens

Patricia Johanson was one of the first artists to think of art as a way to help restore *habitats*. "When I was a child," she says, "it always made me want to cry when people cut down trees and destroyed the landscape in order to build a new road or house . . . . Today I design sculptures that are useful to both people and wildlife." By transforming polluted areas into ecologically balanced parks—some with plant-shaped walkways—Johanson encourages people to experience a connection between art and nature.

In the United States, nearly half a million acres of *wetlands* are lost each year to *pollution*, development, and dumping.

More than half of the world's wetlands have already been destroyed.

Even if you live in a city, a backyard garden can be a refuge for up to 30 kinds of birds, 12 kinds of butterflies, 6 kinds of wild mammals—and you!

Small World

You can design a miniature habitat, known as a terrarium, in a glass jar, a goldfish bowl, or even a large plastic soda bottle that has been cut in half and taped back together after planting. Stones, twigs, sea shells, small plants, and mosses can all be part of your habitat.

Snake Shapes

In California, Patricia Johanson designed a sculptural nature trail in the shape of a San Francisco garter snake, currently listed as an *endangered species*. Choose an animal or plant and create a garden that uses its shape as part of your design.

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Approximately 97% of the earth's water is in the oceans; another 2% is ice. All the fresh water that people use comes from the remaining 1%.

Less than 10% of the ancient forest that once stretched from California to Alaska remains today.

One square mile of the earth's forest is cut down, burned, or bulldozed every five minutes.

Solution Stories

Helen Mayer Harrison and Newton Harrison visit places all over the world to study the effects of pollution. Their art involves large areas of land and water, sometimes larger than a whole country. After thoroughly studying a problem in the *environment*, the Harrisons present their solutions through maps, photograph collages, and spoken poetry. Their art reminds us of ancient storytellers whose tales have influenced many cultures.

Picture a Change
Take a photograph of a place in your neighborhood that you think could be improved ecologically. Mount the photo on a large piece of paper, adding your description of the problem and your plan for restoring the area. You may also want to include maps, newspaper articles, interviews, letters, drawings, poems, or other important information on your ecological poster.

Weave a Story
Invent a story about a polluted place you have seen in your community or elsewhere. Your story can be based on fact or as fanciful as you like.

Helen Mayer Harrison and Newton Harrison, *The Lagoon Cycle*, 1972-82 (illus. based on photograph)

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Ocean Landmark

Betty Beaumont has created several works that deal with the environmental problems in oceans. Beaumont's fascination with the sea began when she was an underwater photographer and diver. It inspired her to design an unusual ocean habitat—an underwater reef made from blocks of recycled coal ash. Although most people cannot see her creation, because it is submerged off the coast of Long Island, she has underwater photographs showing that fish and plants thrive there.

Almost 80% of the earth's plants and animals live in the oceans.

Americans dump 16 tons of sewage into their water every minute of every day.

Kids Against Pollution
Betty Beaumont's projects demonstrate that teamwork can be more effective than working alone: to build her reef, she enlisted the help of scuba divers, oceanographers, and engineers. In 1987 a group of New Jersey students formed Kids Against Pollution to help solve environmental problems. Now there are hundreds of KAP chapters around the country fighting pollution in their communities. To find out about starting a chapter in your school, contact: Kids Against Pollution, Tenakill School, 275 High St., Closter, NJ 07624; (201) 784-0668.

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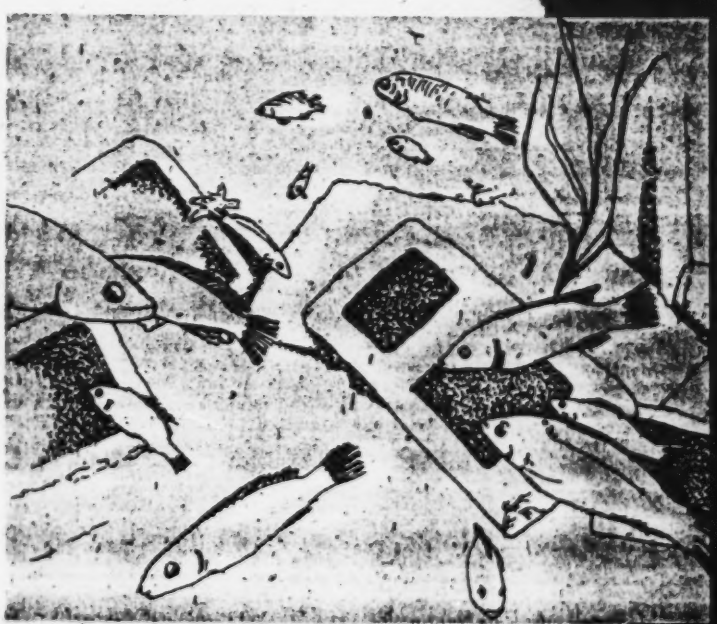


Betty Beaumont, *Ocean Landmark Project*, 1980 (illus. based on photograph)

Time Landscapes

Alan Sonfist's art reminds us of how the land looked before people began building, mining, and farming. He researches and replants native trees and vegetation that once thrived where cities now stand. These "Time Landscapes" are based on the idea that nature deserves monuments just as much as historic events and heroes do.

If we all recycled our Sunday newspapers, we could save more than half a million trees each week.

For every 1,000 trees we cut down, we plant only 25 in their place.

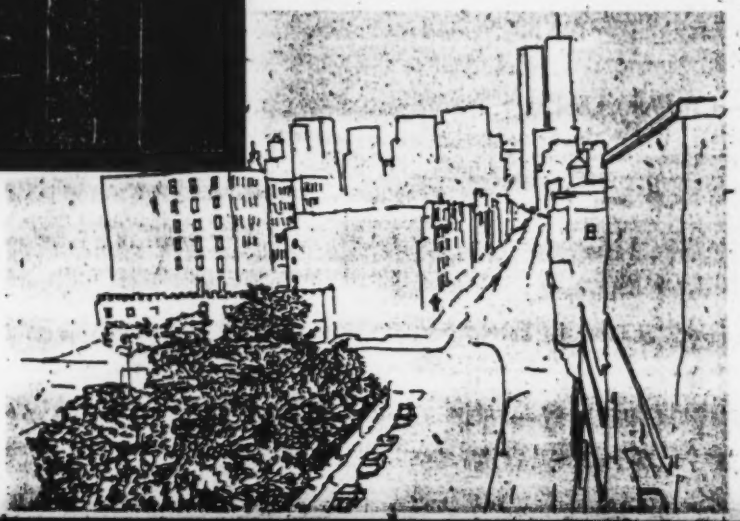
Since 1900, over 86% of all known varieties of apple have become *extinct*.

Monument to Nature
Draw a plan for your own monument to nature, keeping these questions in mind:
What would your monument be made of?
What shape would it have?
Where would you place it?
Would it have an inscription?

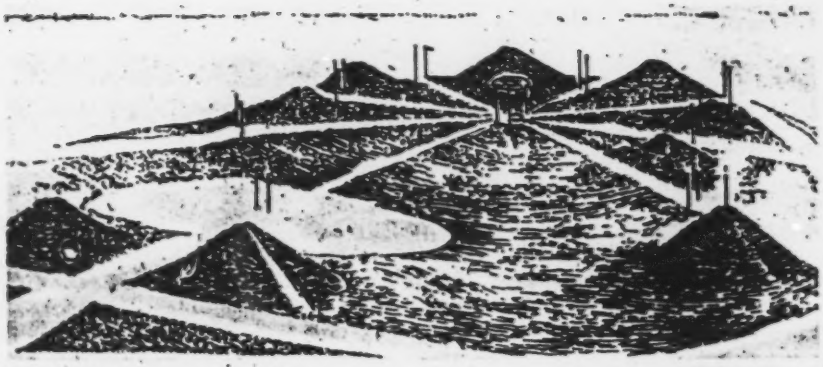
Spring Re-Leaf
Try growing your own tree. Gather the seeds in the fall and plant a different tree seed in each flowerpot. Water the flowerpots regularly In the spring the baby trees should be planted outside once they are 4 to 5 inches high.

Alan Sonfist, *Time Landscape*, conceived 1960s; planted 1978 (illus. based on site plan)

Alan Sonfist, *Time Landscape* (Greenwich Village, New York), planted 1978 (illus. based on photograph)



Nancy Holt, *Sky Mound Rendering*, 1985 (illus. based on drawing)



Sky Mound

If you've ever stared in wonder at the stars or watched the sky turn colors at sunset, then you know some of the same feelings that inspire artist Nancy Holt.

Holt's current project—"Sky Mound," in Hackensack, New Jersey—will transform an entire *landfill* into a public park and observatory. In creating "Sky Mound" Holt will give people a place to look at and think about the sky, the stars, and nature.

Night Sights

What is the best place you know of to look at the stars or watch the sunset? How does looking at the stars make you feel? Why does Nancy Holt think it's important for us to remember how the sun, moon, stars, and seasons affect us?

People have always looked at the night sky and imagined that the stars formed the shapes of people and animals. Next time you look at the stars, try inventing your own constellations. Give a name to each one, draw it, and write a story about it.

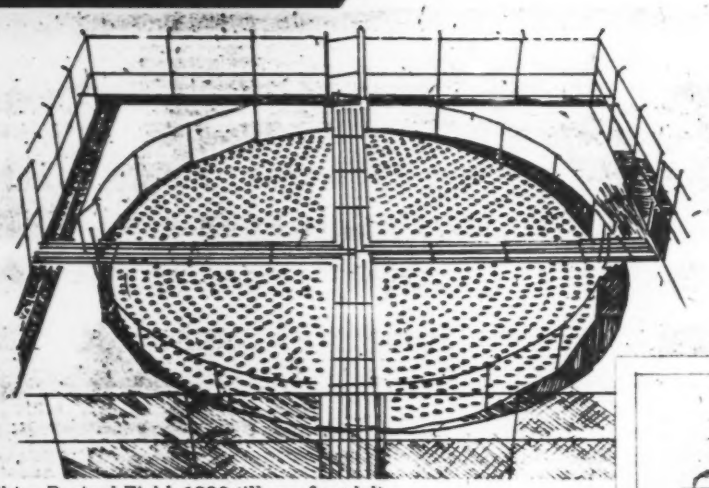
Private Planetarium

You can make your own private planetarium. Find an empty cardboard oatmeal or circular ice cream container. Carefully poke holes in the bottom in the shape of a real or imagined constellation. In a darkened room shine a flashlight up inside the carton and point it toward the ceiling. An instant starry sky!

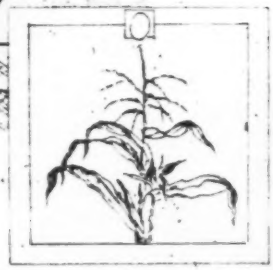
Space is becoming a floating junkyard littered with millions of pieces of space junk, from tiny bits of metal to rockets as big as three-story buildings.

Revival Field

Mel Chin is helping to clean up *toxic waste* by growing special plants called *hyperaccumulators* that absorb *heavy metals* in the soil through their roots and stems. Chin believes that these plants can be an important help in cleansing polluted land. The importance of *biodiversity* is another theme in Chin's work; he shows how plants may affect our lives in ways still unknown to us.



Mel Chin, *Revival Field*, 1990 (illus. of model)



Mel Chin, Study of hybrid corn, hyper-accumulator for *Revival Field*, 1990 (tracing based on drawing)

Toxic Thirst
Place a stalk of celery in a glass of water that has been tinted with food coloring or ink. Wait a few hours. What does this experiment suggest about how plants can absorb pollutants?

Drawn from Nature
Mel Chin has made careful drawings of the plants he uses in his work. Begin your own ecological sketch book. Include drawings of plants, birds, leaves, seeds, insects, nests, animals. With a bit of practice, your powers of observation, your knowledge of the environment, and your drawing skills will all improve.

Each week about 20 kinds of plants and animals become *extinct*. Their importance in nature and their value to humans will never be known.

A plant that grows in Madagascar (an island off Africa's east coast) has been used to make a drug that can cure some kinds of cancer.

Love Canal, in western New York State, was used as a dump for more than 11,000 tons of toxic waste during the 1940s and 1950s. In the 1980s leaks from that dump forced over 200 families to leave their homes.

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Fish have disappeared from more than 200 lakes in the Adirondack Mountains of New York State.

Medicine for Nature

In 1983 Buster Simpson began placing large, hand-carved discs of limestone weighing up to 50 pounds in rivers across the country. He calls this project "River Rolaids" or "Tums for Nature" because he hopes the discs will be like medicine for rivers that have been damaged by *acid rain*.

As the discs dissolve, the *lime* they contain will help counteract the acid and restore the water's natural balance, but the discs also remind people that our rivers have become so sick that they need to take medicine.

Prescription for Earth

To make his point, Buster Simpson uses his artwork to compare the earth's condition with human illness. Can you think of a global pollution problem that parallels the following human illnesses?

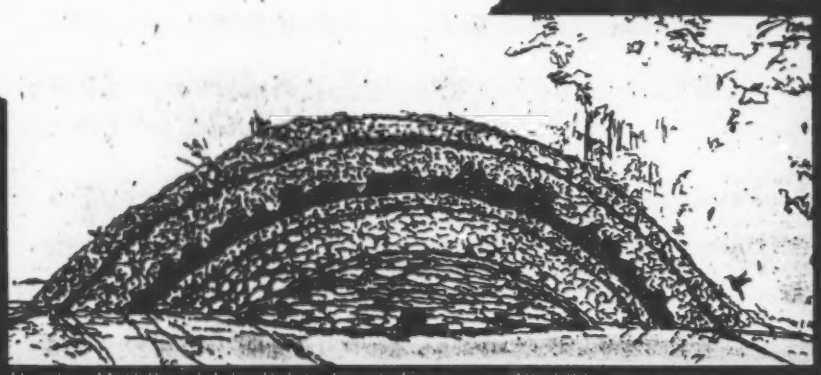
Human	Global
Fever	_____
Indigestion	_____
Poisoning	_____
Asthma	_____

Can you think of prescriptions for these illnesses that can help the earth get healthy again?

Acid Bath

You can see the effects of acid rain for yourself. You'll need similar houseplants kept side by side so they receive the same amount of sunlight. Give them the same amount of water, but add a few teaspoons of lemon juice or vinegar to one's water supply. After two weeks which plant appears healthier?

Buster Simpson, *River Rolaids* or *Tums for Nature*, 1983-ongoing (illus. based on photograph)



Heather McGill and John Roloff, *Isla de Umunnum*, 1986-90
cellus, based on photograph

It's estimated that more than 85 million people in North America put food in feeders or plants in their yards to attract birds.

Home for the Hummingbirds

Heather McGill and John Roloff have worked together to create sculptures that attract hummingbirds. They named their work "Isla de Umunnum" after the Ohlone Indian words meaning "Island of the Hummingbirds" and built their sculpture in the shape of a Native American mound. To attract hummingbirds McGill and Roloff incorporated honeysuckle, poppies, vines, and other plants that hummingbirds like to eat.

Food for Flying

You can make your own artistic bird feeder from wood, old milk cartons, onion bags, and/or plastic containers. Add seeds, unsalted nuts, fruit, peanut butter, and cooking grease. Birds also like kitchen scraps including stale cheese, bread, potatoes, doughnuts, even cooked pasta! Hang the feeder from a tree and watch the birds enjoy your creation.

Backyard Habitat

With the loss of many natural habitats, yards in cities and suburbs have become valuable miniature wildlife preserves. To find out more about creating a wildlife refuge in your backyard, contact: The Backyard Habitat Program, National Wildlife Federation, 1412 16th St., N.W., Washington, DC 20036; (202) 797-6800.

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Flow City

Have you ever heard of an artist who is inspired by garbage? Mierle Laderman Ukeles is the first artist to devote herself to this unglamourous issue. In her work, she reminds us that we are responsible for our own garbage and that it is difficult to clean up the mess our society makes. Her installation "Flow City" is located in New York City's Department of Sanitation Marine Transfer Station, where trucks deliver garbage for barging to a *landfill* on Staten Island. "Flow City" shows visitors the huge amounts of garbage we make and helps educate people about the need to recycle.

Garbage Knapsack

Want to see how much trash you make in a day? Get a garbage bag and every time you have something to throw away, put it in the bag. Carry the bag with you wherever you go. At the end of the day you'll know how much trash one person can make.

Try this experiment with your class and then sort out recyclable trash. You'll see how much recycling can reduce landfills.

Each year Americans dispose of 7 million automobiles, 220 million tires, 1.6 billion ballpoint pens, and 16 billion diapers.

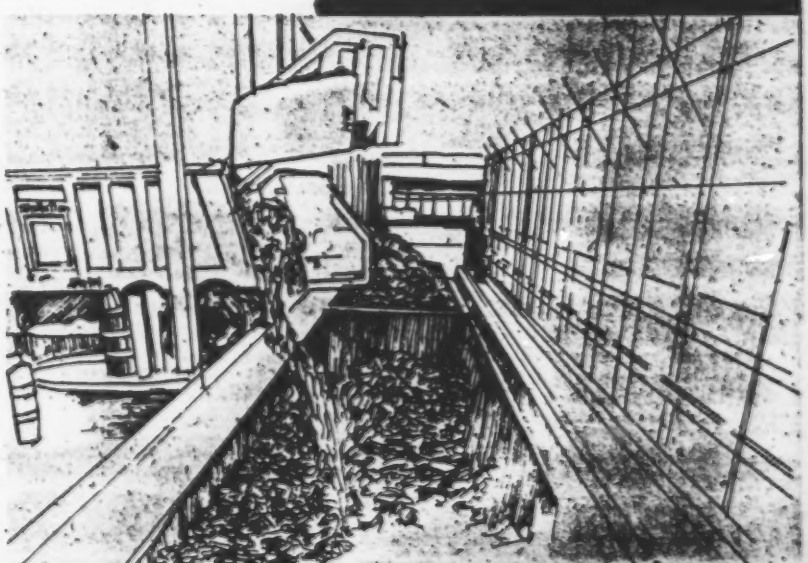
Most families throw away about 88 pounds of plastic a year.

Recycled Art

Many artists reuse discarded materials to make their art. Jewelry, collages, craft projects, musical instruments, masks, costumes, and found object sculpture can all be made from recycled materials.

Talking Trash

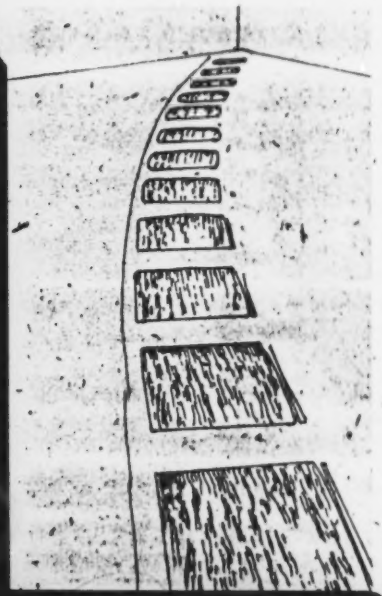
In a performance she called "Touch Sanitation," Ukeles shook hands with every sanitation worker in New York City to thank them for the important work they do. Similarly, you can interview maintenance workers at your school to find out how much trash your school produces and how much of it is recycled. Include the interview in your school newspaper.



New York City Department of Sanitation Marine Transfer Station (illus. based on photograph)

River of Learning

"L.A. River Project" is an ecological artwork created by artist Cheri Gaulke, teacher Susan Boyle, and students from Wilson High School in Los Angeles—Susan Barron, Jose Esquivel, Leonard Martinez, and Manuel Ortega. The students studied and videotaped the Los Angeles River as a habitat for plants and animals, following the river's flow through concrete channels as it becomes polluted by garbage. The students also interviewed politicians and environmentalists, learning about the history of the river as they began to think about its future.



L.A. River Project. Video installation [rest illegible] location photograph.

Each person in the U.S. uses about 80 gallons of water a day.

Untreated sewage and chemical waste are often pumped directly into rivers.

Adopt a Plot
You can adopt a portion of land (or water) and make it nicer for everyone by picking up litter, by planting flowers, bushes, or trees, and by being sure never to spill anything harmful on it.

Tales of Your Town
Research the ecological changes in your own neighborhood over the years. Start by interviewing older residents, then visit your library and city hall, which will have documents and photographs showing how new roads and buildings altered your local environment.

What was your community like fifty years ago? Had your school or home been built yet? What was your community like one hundred years ago, five hundred years ago? Can you find out anything about what it will be like in the future? Are there plans for new development? How might this affect the environment in your neighborhood?

When you have gathered the information think about how you would like to present it. A song, poster, collage, diorama, videotape, play, mural, or poem are just a few possibilities. You may be able to do your presentation alone or you may need the help of other people.

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Glossary

Acid rain	Gases from coal-burning power stations and factories are making the clouds more acidic. When it rains this acidity can damage trees, crops, lakes, and rivers.
Biodiversity	The incredible complexity and variety of living things. Nature needs diversity to keep the world healthy.
Endangered species	Animals and plants that have dwindled in number and are in danger of becoming extinct.
Environment	All the things around us including water, air, food, plants, and animals (the natural environment) and houses, factories, and roads (the built environment).
Extinct species	Animals and plants that have died out and can no longer be found on earth.
Habitat	A setting that provides the necessities of life for plants and animals.
Heavy metals	Metals like cadmium, aluminum, and mercury that are found in polluted soil and are poisonous to plants, animals, and humans.
Hyperaccumulators	Special plants that may prove helpful in cleansing soil by absorbing toxic metals through their roots.
Landfill	Garbage from our homes is usually buried in the ground at disposal sites. We are making so much garbage that we are running out of room to bury it.
Lime	A chemical poured into lakes to reduce their acid content.
Pollution	Animals, people, and factories all produce waste. When there is too much waste or the waste contains poisons, it is known as pollution.
Toxic	Poisonous.
Wetlands	Swamps, marshes, and other low, wet areas that often border rivers, lakes, and oceans. They provide habitats for many plants, birds, and animals.

Further Reading

Your local library is a great source of information on art and ecology. Here are just a few of the books you can find there.

Acid Rain by John Baines, Steck-Vaugh & Co., Austin, Texas, 1990.

Garbage! Where It Comes From, Where It Goes by Evan and Janet Hadingham, Simon and Shuster, New York, 1990.

Glow in the Dark Constellations: A Field Guide for Young Stargazers by C.E. Thompson, Grosset & Dunlap, Inc., New York, 1989.

How Green Are You? by David Bellamy, Clarkson Potter, Inc., New York, 1991.

The Kids' Nature Book: 365 Indoor/ Outdoor Activities and Experiences by Susan Milford, Williamson Publishing, Charlotte, Vermont, 1989.

Linnea's Windowsill Garden by Christina Bjork and Lena Anderson, R & S Books, Stockholm and New York, 1978.

The Lorax by Theodor Seuss Geisel (Dr. Seuss), Random House, New York, 1971 (also available in video).

My First Green Book by Angela Wilkes. Alfred A. Knopf, New York, 1991.

National Audubon Society's North American Birdfeeder Handbook: The Complete Guide to Attracting, Feeding and Observing Birds in Your Yard by Robert Burton, Dorling Kindersley, Inc., New York, 1992.

Our Endangered Planet: Rivers and Lakes by Mary Hoff and Mary M. Rodgers, Lerner Publications Co., Minneapolis, 1991.

World About Us: Vanishing Habitats by Tony Hare, Gloucester Press, New York, 1991.

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Skidmore, Steve. *What a Load of Trash*. Brookfield, CT: The Millbrook Press, 1991.